

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 1E. The sheet, which includes Figs. 1A-1E, replaces the original sheet including Figs. 1A-1E.

Attachment: Figures 1A-1E (1 sheet)

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 1 and 6 were pending. Claims 2-5 and 7-14 have been withdrawn. By this Amendment, Claims 1 and 6 have been amended and new Claims 15-18 have been newly added. No new matter has been introduced. After the entry of this Amendment, Claims 1, 6 and 15-18 will be currently pending for reconsideration, of which Claims 1 and 6 are independent claims.

In the Office Action mailed July 27, 2007, the abstract and title of the invention were objected to for informalities, the drawings were objected to for a typographical error, and Claims 1 and 6 were objected to for lack of clarity and precision. Claim 1 and 6 were further rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,196,939 to Elabd et al. ("Eladb"). To the extent that the grounds of rejection are still applied to the currently pending claims, they are respectfully traversed. Applicants submit that no new matter is presented herein.

Applicant has amended the Abstract to be a better form, amended the Title of the invention to –A Charge Transfer Device and a Solid-State Imaging Device Using the Charge Transfer Device – to overcome the objection and amended the typographical error of Fig. 1E. Therefore, Applicant respectfully submits that the objections to the Abstract, Title and the drawings are now overcome.

Claim 1, as amended, recites an electric charge transfer apparatus, comprising: a plurality of vertical charge transfer devices, each of which transfers a signal electric charge, a plurality of charge-discharging circuit sets formed next to each vertical

transfer device, each charge-discharging circuit set including at least two charge-discharging circuit connected in a serial manner for discharging the signal electric charge transferred by at least one of adjacent vertical transfer devices, and an output circuit that outputs the signal electric charge transferred by the vertical charge transfer devices to an outside of the electric charge transfer apparatus. Similarly features as above are also recited in amended Claim 6.

The Examiner alleged that Elabd teaches a plurality of vertical charger transfer devices, e.g., vertical registers 15A, 15B, and 15C, a plurality of charge-discharging circuits, e.g., collectively dump drain 35, and an output circuit, e.g., transfer registers 17A and 17B and thus asserted that Claims 1 and 6 are anticipated by Eladb.

Applicant respectfully traverses such assertion. As described in col. 4 lines 28-61 and as shown in Fig. 4, Elabd describes an apparatus for transferring data from image array 13 to transfer registers 17. A group of vertical registers 15 are used to transfer rows of data held in the image array 13 to a storage register 33. At the storage register 33, it is determined which rows of data are selected for transfer. Those selected for transfer are then transferred to transfer registers 17 and those non-selected are dumped in a vertical dump drain 35. Further, Eladb includes two transfer registers 17A and 17B for receiving charges stored in odd-number columns and even-number columns of the transferred row, respectively.

Accordingly, the dump drain 35 of Elabd is not a charge-discharge circuit of amended Claims 1 and 6 because Elabd does not mention how the dump drain 35 charges and discharges the image pixels of the image array 13. More particularly, Elabd fails to teach or suggest a plurality of charge-discharging circuit sets formed next

to each vertical transfer device, each charge-discharging circuit set including at least two charge-discharging circuit connected in a serial manner for discharging the signal electric charge transferred by at least one of adjacent vertical transfer devices, as recited in amended Claims 1 and 6.

Accordingly, it is respectfully submitted that amended Claims 1 and 6 are not anticipated by Elabd under 35 U.S.C. §102(a). Furthermore, as Eladb fails to teach or suggest that each charge-discharging circuit set includes at least two charge-discharging circuits connected in a serial manner, as recited in amended Claims 1 and 6, it is submitted that Eladb teaches a different concept from the subject invention. Accordingly, amended Claims 1 and 6 should be patentable over Eladb.

The newly added Claims 15-18 are dependent claims from Claim 1, which is patentable based on the reasons stated above. Therefore, it is respectfully submitted that Claims 15-18 are also patentable at least due to their dependency from patentable amended independent Claim 1.


CONCLUSION

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of claims 1 and 5, and the prompt issuance of a Notice of Allowance are respectfully requested.

Should the Examiner believe that anything further is necessary in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefore are hereby authorized to be charged to our Deposit Account No. 01-2300 referencing docket number **107317-00063**.

Respectfully submitted,



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